

LISTING OF THE CLAIMS

1. (Original) A shared cache server being placed on a common network in which a plurality of virtual networks each being placed in a virtually partitioned manner is constructed corresponding to a plurality of groups, comprising:

a storage device to store contents in each of a plurality of storage areas allocated corresponding to said plurality of groups;

a plurality of virtual interfaces being placed in a manner to correspond to said plurality of virtual networks;

an address converting function section, when receiving a packet requesting for contents with a Uniform Resource Locator (URL) designated through one of said virtual interfaces, converts part of an Internet Protocol (IP) address contained in said packet to an internal address corresponding to a virtual interface having received said packet; and

a cache function section, based on an internal address converted by said address converting function section, reads contents from a corresponding storage area of said storage device.

2. (Original) The shared cache server according to Claim 1, further comprising a tag inserting function section to convert said internal address to a tag corresponding to said group and to insert said tag into said Uniform Resource Locator and wherein said cache function section designates contents based on said Uniform Resource Locator into which said tag is inserted.

3. (Original) The shared cache server according to Claim 2, wherein said tag inserting function section converts, for a packet with a specified Uniform Resource Locator designated, said internal address to a specified tag being used commonly in said group.

4. (Original) The shared cache server according to Claim 1, further comprising a storage capacity managing function section to manage storage capacity in a storage area in every said group.

5. (Original) The shared cache server according to Claim 4, wherein said storage capacity managing function section dynamically manages said storage area in every said group.

6. (Original) The shared cache server according to Claim 1, further comprising a Domain Name System (DNS) proxy function section to designate a server in which contents are stored when contents designated by said packet are not stored in said storage device.

7. (Original) The shared cache server according to Claim 1, wherein said plurality of virtual networks each being placed in a partitioned and virtual manner is constructed in accordance with IEEE 802. 1Q.

8. (Original) The shared cache server according to Claim 1, wherein said plurality of virtual networks each being placed in a virtually partitioned manner is constructed in accordance with MPLS Multi Protocol Label Switching (MPLS) technology.

9. (Original) A shared cache server being placed on a common network connected to a plurality of groups each having an Internet Protocol address range to be used being different from one another, comprising:

a storage device to store contents in each of a plurality of storage areas corresponding to said plurality of groups; and

a cache function section to convert, when receiving a packet requesting for contents with a Uniform Resource Locator (URL) designated, part of an Internet Protocol (IP) address contained in said packet to a tag corresponding to said group and to insert said tag into said Uniform Resource Locator (URL) and to read contents from a storage area of said storage device based on said Uniform Resource Locator (URL) into which said tag has been inserted.

10. (Original) A shared cache server being placed on a common network in which a plurality of virtual networks each being placed in a virtually partitioned manner is constructed corresponding to a plurality of groups, comprising:

a storage device to store contents in each of a plurality of storage areas allocated corresponding to said plurality of groups;

a plurality of virtual interfaces being placed in a manner to correspond to said plurality of virtual networks;

an address converting means, when receiving a packet requesting for contents with a Uniform Resource Locator (URL) designated through one of said virtual interfaces,

converts part of an Internet Protocol (IP) address contained in said packet to an internal address corresponding to a virtual interface having received said packet; and

a cache means, based on an internal address converted by said address converting means, reads contents from a corresponding storage area of said storage device.

11. (Original) The shared cache server according to Claim 10, further comprising a tag inserting means to convert said internal address to a tag corresponding to said group and to insert said tag into said Uniform Resource Locator and wherein said cache means designates contents based on said Uniform Resource Locator into which said tag is inserted.

12. (Original) The shared cache server according to Claim 11, wherein said tag inserting means converts, for a packet with a specified Uniform Resource Locator designated, said internal address to a specified tag being used commonly in said group.

13. (Original) The shared cache server according to Claim 10, further comprising a storage capacity managing means to manage storage capacity in a storage area in every said group.

14. (Original) The shared cache server according to Claim 13, wherein said storage capacity managing means dynamically manages said storage area in every said group.

15. (Original) The shared cache server according to Claim 10, further comprising a Domain Name System (DNS) proxy means to designate a server in which

contents are stored when contents designated by said packet are not stored in said storage device.

16. (Original) The shared cache server according to Claim 10, wherein said plurality of virtual networks each being placed in a virtually partitioned manner is constructed in accordance with IEEE 802. 1Q.

17. (Original) The shared cache server according to Claim 10, wherein said plurality of virtual networks each being placed in a virtually partitioned manner is constructed in accordance with MPLS Multi Protocol Label Switching (MPLS) technology.

18. (Original) A shared cache server being placed on a common network connected to a plurality of groups each having an Internet Protocol address range to be used being different from one another, comprising:

a storage device to store contents in each of a plurality of storage areas corresponding to said plurality of groups; and

a cache means to convert, when receiving a packet requesting for contents with a Uniform Resource Locator (URL) designated, part of an Internet Protocol (IP) address contained in said packet to a tag corresponding to said group and to insert said tag into said Uniform Resource Locator (URL) and to read contents from a storage area of said storage device based on said Uniform Resource Locator (URL) into which said tag has been inserted.